BASF Aktiengesellschaft

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We claim:

1. A laminated sheet or film comprising

(1) a substrate layer comprising - based on the sum of the amounts of components A and B and, if used, C and/or D, which totals 100% by weight -

a 1 - 99% by weight of a graft copolymer of

a1 1 - 99% by weight of a particulate graft base A1 comprising the following monomers:

a11 80 - 99.99% by weight of at least one C_{1-8}-alkyl ester of acrylic acid as component A11,

a12 0.01 - 20% by weight of at least one polyfunctional crosslinking monomer as component A12;

a2 1 - 99% by weight of a graft A2 comprising the following monomers, based on A2:

a21 40 - 100% by weight of units of styrene, a substituted styrene or a (meth)acrylate, or mixtures thereof, as component A21 and

a22 up to 60% by weight of units of acrylonitrile or methacrylonitrile as component A22;

the graft A2 consisting of at least one graft shell and the graft copolymer having a mean particle size of 50 - 1000 nm,

as component A,

b 1 - 99% by weight of a copolymer of

b1 40 - 100% by weight of units of styrene, a substituted styrene or a (meth)acrylate, or mixtures thereof, as component B1,

b2 up to 60% by weight of acrylonitrile or methacrylonitrile as component B2,

as component B,

c 0 - 80% by weight of polycarbonates as component C, and

d 0 - 50% by weight of fibrous or particulate fillers or mixtures thereof as component D,

and

(3) a transparent top layer of polymethyl methacrylate.

2. A laminated sheet or film as claimed in claim 1, additionally comprising between the top layer and the substrate layer

(2) an interlayer of impact-modified polymethyl methacrylate, polycarbonate or a molding composition of component (1) as set forth in claim 1 without polycarbonate, if component (1) contains polycarbonate.

3. A laminated sheet or film comprising

(2') a layer of impact-modified polymethyl methacrylate, polycarbonate or a molding composition of component (1) as set forth in claim 1

and

(3) a top layer of polymethyl methacrylate.

4. A laminated sheet or film as claimed in claim 1 having an overall thickness of from 100 μm to 10 mm.

5. A laminated film comprising, in this order,

(1') a substrate layer comprising a molding compound of component (1) as set forth in claim 1, ABS, polycarbonate, polybutylene terephthalate, polyethylene terephthalate, polyamide, polyetherimide, polyether ketone, polyphenylene sulfide, polyphenylene ether or blends thereof, having a layer thickness of from 90 to 990 μm,

(3') a transparent top layer comprising polymethyl methacrylate, high-impact polymethyl methacrylate, ABS, polycarbonate, polyethylene terephthalate, styrene-acrylonitrile copolymers, polyamide, polyether sulfone or polysulfone, having a layer thickness of from 10 to 100 μm,

it being possible for the substrate layer to comprise special-effect colorants and comprising them if the substrate layer and the top layer are composed of the same molding compounds, and the overall thickness of the laminated film being from 100 to 1000 μm.

6. A laminated film as claimed in claim 5, additionally comprising between the top layer and the substrate layer

(2") an interlayer of polymethyl methacrylate, high-impact polymethyl methacrylate, ABS, polycarbonate, polyethylene terephthalate, styrene-acrylonitrile copolymers, polyamide, polyether sulfone or polysulfone, which comprises special-effect colorants and has a layer thickness of from 50 to 400 μm.

7. A laminated film as claimed in claim 5, additionally comprising, on the outer surface of the substrate layer,

(0) an adhesion layer comprising an adhesion promoter having a layer thickness of from 5 to 100 μm.

8. A laminated sheet or film as claimed in claim 1, the ratio of the MFI values of the individual components of the laminated sheet or film being not more than 3:1.

9. A process for producing a laminated sheet or film as claimed in claim 1 by adapter coextrusion or die coextrusion of components (0) and/or (1)/(1') and/or (2)/(2')/(2") and/or (3)/(3'), the overall laminate being produced in a single-stage process.

10. A process for producing a laminated sheet or film as claimed in claim 1 by laminating films or sheets of components (0) and/or (1)/(1') and/or (2)/(2')/(2") and/or (3)/(3') onto one another in a heatable roll nip.

11. A process for producing a molding from a laminated sheet as claimed in claim 1 by thermoforming the laminated sheet.

12. A process for producing a molding from a laminated sheet as claimed in claim 2 by thermoforming the laminated sheet.

13. A process for producing a molding from a laminated sheet or film as claimed in claim 3 by thermoforming the laminated sheet or film and backspraying with component (1) as set forth in claim 1 or with a polyurethane foam.

14. A process for producing a molding from a laminated film as claimed in claim 5 by backspraying or back-casting the laminated film with component (1') as set forth in claim 5 or with a polyurethane foam, it being possible for the laminated film to be thermoformed beforehand, or by laminating a molding comprising the component as set forth in claim 5, or a polyurethane foam, with the laminated film.

15. A molding comprising a shaped laminated sheet as claimed in claim 1.

16. A molding comprising a shaped laminated sheet as claimed in claim 2.

17. A molding comprising a shaped laminated sheet or film as claimed in claim 3, which is backsprayed or back-cast with component (1') as set forth in claim 5 or with a polyurethane foam, or where a molding comprising component (1') as set forth in claim 5, or a polyurethane foam, is laminated with the laminated film.

18. A molding as claimed in claim 12 in the form of an automotive exterior bodywork component.

19. A laminated sheet or film as claimed in claim 1, wherein a transport protection film is applied to the outside of the top layer ~~(3) or (3')~~, ~~respectively.~~

20. ~~A laminated~~ sheet or film as claimed in claim 3 having an overall thickness of from 100 ~~mm~~ µm to 10 mm.